

Chronic Disease Indicators: Indicator Definition



Self blood glucose monitoring among adults aged ≥ 18 years with diabetes

Category:	Diabetes
Demographic Group:	Resident persons aged ≥ 18 years with diabetes.
Numerator:	Respondents aged ≥ 18 years ever told by a doctor or health professional that they have diabetes (excluding women who were told only when pregnant) who report self-blood glucose monitoring at least once daily.
Denominator:	Respondents aged ≥ 18 years ever told by a doctor or health professional that they have diabetes (excluding women who were told only when pregnant, refusals, and unknowns).
Measures of Frequency:	Annual prevalence — crude and age-adjusted (as standardized by the CDC Division of Diabetes Translation to the 2000 U.S. Standard Population, using the direct method) — with 95% confidence interval. Where feasible, 3-year averages were used. Not all states have complete data for each year of monitoring; therefore, each 3-year average estimate is composed of at least two years of data. U.S. estimates are based on single years of data.
Time Period of Case Definition:	Previous year.
Background:	In 2002, approximately 57% of adults with diabetes reported self-blood glucose monitoring at least once daily.
Significance :	Glycemic control among adults with diabetes is important in preventing or delaying the onset or progression of diabetes-related complications (e.g., retinopathy, lower extremity amputations, and end-stage renal disease). Self-monitoring of blood glucose assists persons with diabetes in controlling their blood glucose.
Limitations of Indicator:	The reliability and validity of this indicator is unknown.
Data Resources:	Behavioral Risk Factor Surveillance System (BRFSS). http://www.cdc.gov/diabetes/statistics/
Limitations of Data Resources:	Data from multiple years might be aggregated to increase the sample size. As with all self-reported sample surveys, BRFSS data might be subject to systematic error resulting from noncoverage (e.g., lower telephone coverage among populations of low socioeconomic status), nonresponse (e.g., refusal to participate in the survey or to answer specific questions), or measurement (e.g., social desirability or recall bias). The National Health Interview Survey (NHIS) can be used as an alternative data source; however, the size of the sample from NHIS might not be adequate for calculating stable, state-specific estimates.
Healthy People 2010 Objectives:	5-17: Increase the proportion of adults with diabetes who perform self blood-glucose monitoring at least once daily.

* See Klein RJ, Schoenborn CA. Age adjustment using the 2000 projected U.S. population. Hyattsville, MD: US Department of Health and Human Services, CDC, National Center for Health Statistics, 2001. Healthy people 2010 statistical notes, no. 20. <http://www.cdc.gov/nchs/data/statnt/statnt20.pdf>